

KSC/45SW ENVIRONMENTAL CHECKLIST

1. PROJECT TITLE: TYPE TITLE HERE		2. PROJECT NO.: Type Project # here	
3. PROJECT LOCATION: KSC <input type="checkbox"/> CCAFS <input type="checkbox"/> PAFB <input type="checkbox"/> OTHER: If other, type info here		4. FACILITY NAME/NO.: Type info here	
5. REQUESTOR/PROJECT LEAD: Type name here ORG/MAIL CODE: Type mail code here		6. PHONE NO.: Type info here	
7. a-p Check the appropriate box (Yes, No, Undetermined) to identify if any component of the proposed project (including, but not limited to: construction, installation, demolition, removal, activation or operation) will involve any of the items listed. Use the attached instructions.			
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	a. <u>Stormwater</u> : Construction of new building/pavement/impervious surface and /or modification of an existing stormwater system. <i>Approximate number of square feet of impervious surface being added:</i> Type SF here		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	b. <u>Drinking/FIREX Water</u> : Installation or modification of potable water system. <i>Include diameter of new water piping if known.</i> Type info here		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	c. <u>Domestic/Industrial Wastewater</u> : Installation or modification of domestic sewer system, including septic tank systems, generation of process wastewater or modification to a system that handles or transports wastewater, including condensate lines, washdowns, outfalls, holding ponds and non-point source discharges associated with industrial applications/processes		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	d. <u>Dewatering</u> : Use of conventional wellpoints, hydraulic pumps, or other means to transfer groundwater (including water in utility manholes) for project activities.		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	e. <u>Painting/Paint Removal</u> : Initial application or repainting of a facility (interior or exterior), structure or utility. Work may include surface preparation such as sandblasting, scraping, water blasting or chemical stripping of existing paint coatings.		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	f. <u>Air Emissions</u> : Discharge into the air either directly (i.e., stack, vent, generator, fume hood, cooling tower, boiler) or indirectly (i.e., painting, sandblasting, refrigerants, halon fire suppression systems). Including, but not limited to Ozone Depleting Chemicals (ODC's) or Hazardous Air Pollutants (HAP's).		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	g. <u>Construction</u> : Constructing, altering, expanding, modifying (other than routine maintenance), or demolishing any building, pavement or structure.		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	h. <u>Land Impacts</u> : Land disturbance, soil addition or removal, digging, grading, trenching, vegetation trimming or removal, and any activity in or near surface waters (including ditches and low-lying areas).		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	i. <u>Exterior Lighting</u> : Installation, refurbishment or modification of exterior lighting.		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	j. <u>Historic Property</u> : Project is at, on, or near VAB, LCC, MLP's, CIF, HQ, O&C, MCC, Crawlerway, Press Site or LC's: 39A, 39B, 34, 26, 19, 14, 13, 5/6.		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	k. <u>Tanks</u> : Construction, modification, or repair of above or underground storage tanks (including piping and/or containment).		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	l. <u>Other</u> : Please describe any other aspect of the proposed action that could potentially effect human health or the environment. Use separate sheet if necessary. Type info here		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	m. <u>Hazardous Material and Waste</u> : Use, storage, generation and/or disposal of any hazardous or toxic material, petroleum products or paint coatings.		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	n. <u>Asbestos Containing Material (ACM)</u> : Disturbance of construction material that may contain asbestos (i.e., roofs, walls, ceilings, floor tile, piping insulation, caulk, etc.).		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	o. <u>PCB</u> : Disturbance or replacement of electrical distribution systems, communication systems, lightning protection, transformers, non-liquid PCB materials or any other items believed to contain PCB's, including paint coatings.		
YES <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> NO <input type="checkbox"/>	p. <u>Radiation</u> : Generation of ionizing or non-ionizing radiation or use of any radiation source.		
8a. PROJECT LEAD/REQUESTOR SIGNATURE I have reviewed the information contained herein, verified that it is accurate and complete and hereby submit this form for environmental concurrence. Signature: _____ Date: _____			
8b. ***For 45th Space Wing projects and for projects located on 45th Space Wing property*** CATEX DETERMINATION/ENVIRONMENTAL COORDINATION Proposed Categorical Exclusion (CATEX) _____ <div style="text-align: center; font-size: small;">(Reference applicable CATEX)</div> Environmental Requirements Form Attached _____ (Yes, No, N/A) 45 th CES/CEV or ESC Representative : Name: _____ Mail Code: _____ Phone: _____ Signature: _____ Date: _____			

ENVIRONMENTAL CHECKLIST PREPARATION INSTRUCTIONS

1. **Project Title:** Title of proposed action as it appears on the work order or programming document.
 2. **Project Number:** Insert SON, WON, PCN, DBEH, SXHT, MAXIMO or other authorized work identification number, as appropriate. If no project number has been assigned, leave blank and Work Control or Plans and Programs will add this.
 3. **Project Location:** Check box for applicable installation where work will be conducted. For off-site work, identify location in "Other".
 4. **Facility Name/Number:** Use the proper name for the facility where work is being conducted and the assigned facility number. If proposed action is not directly associated with a facility, use the closest facility for reference.
 5. **Requestor/Project Lead:** List name of individual who has requested the proposed action. If this individual cannot be identified, or no single individual is responsible for submitting the work requirement, then list the person who is most familiar with the proposed action, such as the design engineer or project lead and their mail code.
 6. **Phone Number:** Telephone number of individual identified in #5.
- 7 a. - p. The items listed in this section could be included in, or result from, the work that is being requested/performed. To the best of your knowledge, indicate by checking the applicable box if any of these items could be effected by the work requested/performed. Check the "UNDETERMINED" box if you are not certain. If further information is required for items 7 a. - p., please reference the additional instruction sheet.

AF/45th SW

Submit completed checklist (Sections 1 – 8a) with the appropriate work request form (AF Form 332) and include a comprehensive project description, site map/project drawing or sketches. If the answer is "Yes" or "Undetermined" for any of the checklist items, the proponent should contact the appropriate Environmental Planning Function (EPF) to determine if preparation of an AF Form 813 is required.

NASA/KSC Contractors Categorical Exclusion applicability (applies to actions on KSC ONLY)

If **ALL** items in section 7a-l, are marked "NO" the project qualifies for a categorical exclusion (CATEX) and does not need to be forwarded to the NASA EPO if:

- a. All Items in section 7m-p, are marked "NO", **OR**
- b. One or more items in section 7m-p are marked "YES" or "UNDETERMINED" and the appropriate remedial action(s) are implemented, documented and maintained on file with a completed and signed copy of this checklist.

If any item in section 7a-l, is marked "YES" or "UNDETERMINED", then a complete NEPA compliance package must be submitted to the NASA EPO. A NEPA compliance package consists of a comprehensive project description, detailed location maps and complete project drawings or sketches. Contact the JBOSC Environmental Planning Office at 867-3540 for additional assistance.

- 8a. **Requestor Signature:** Signature of person completing checklist.
- 8b. **Environmental Coordination/Concurrence:** For further information please contact the 45th Space Wing Environmental Flight (CEV) for PAFB projects at 494-9259, and the Environmental Support Contractor at 853-6822 for all other 45th Space Wing projects.

ENVIRONMENTAL CHECKLIST ADDITIONAL INFORMATION AND INSTRUCTIONS

SECTION 7a. -p.

The following additional information/instructions for Section 7a - p should be applied to Environmental Checklist preparation for KSC and CCAFS actions.

- a. Stormwater: Stormwater, i.e., rain, is an environmental concern primarily due to potential impacts of rainwater run off from an impervious surface into the surrounding area. Secondly, an impervious surface prevents stormwater from percolating into the ground. Consequently, the St. Johns River Water Management District (SJRWMD) requires a permit to be obtained and a stormwater management system to be constructed when a large impervious surface is created. The threshold for obtaining a permit varies from 4000 square feet for surfaces specifically supporting vehicular traffic, such as roads, parking lots, stabilized areas, etc., to 9000 square feet for buildings inclusive of all other impervious surfaces. The permit threshold can also be “tripped” by adding to or modifying an existing impervious surface, so do not assume your project will not require permitting if new impervious area is below the above thresholds. If you check “yes”, please identify the number of square feet involved.
- b. Drinking/FIREX Water: Check yes if the proposed project involves work that would effect a potable water line. Environmental concerns with work that effects water lines are: 1. The disturbance of a water line typically lowers water quality and therefore, requires disinfection and sampling prior to use; 2. Some connections and/or additions to the existing water system require a permit. Supply as much design information as possible relating to potable water system changes (e.g., new vs. extension, pipe diameter, etc.). Permit determinations and applications will be handled by the applicable environmental office.
- c. Domestic Wastewater/ Industrial Wastewater: Environmental concerns include potential impacts to the Wastewater Treatment Plant with regards to its operation and existing FDEP permit conditions. New connections and septic tank installations may require permitting, inspection, and/or certification. Therefore, check yes if the proposed project will involve installation of new wastewater sources or in any way effect the existing sanitary sewer system. Industrial wastewater is any water-based wastestream, discharge, wash water, deluge outfall, etc., that would result from conducting an industrial-type operation. The source of this wastewater typically requires permitting and therefore, must be identified to the appropriate environmental office as soon as possible. In addition, early environmental coordination could result in the identification of a process alternative that may preclude or minimize the wastestream.
- d. Dewatering: If the proposed project will require the pumping of water to support its construction activities, a permit may be required. There are a number of variances and quantity thresholds based upon the amount of water being transferred and the area where the water will be discharged. Therefore, if your project requires dewatering, check yes and the appropriate environmental office will determine permit applicability.
- e. Painting/Paint Removal: Painting or removal of existing paint coatings, depending on the method and contents of the paint, can pose significant human health risks as well as generate hazardous or controlled wastes. In some cases, old paint coatings containing lead and/or other metals as well as non-liquid PCB’s, will require specific abatement procedures and special disposal of wastes generated. Additionally, use of paint thinner and chemical stripper typically results in generation of wastes requiring special handling and disposal. If known, please indicate if these painting related materials are to be used. If your project includes any painting or paint removal activities check yes for this item and include specific information regarding paint contents, other hazardous materials to be used and painting/paint removal methodology, as applicable.
- f. Air Emissions: If the project (either during construction or operation) would discharge any substance into the air, other than vehicular or normal construction equipment exhaust, check yes and describe the source of the emission in item “7I. Other”. Some emission sources may require State and/or Federal permitting for both construction and operation. Some activities are of concern primarily from the worker health and safety standpoint and secondarily for their potential effects to the natural environment. Therefore, early identification of potential air pollution sources is imperative for worker safety.
- g. Construction: Some proposed construction activities may not have their scope defined well enough to allow easy identification of potential environmental concerns, and certain facilities and certain types of construction activities have restrictions or constraints that may not be easily identifiable. An example may be disposal of wastes from a construction or demolition project as opposed to waste generated from normal operations and maintenance (O&M) type projects. Construction and Demolition (C&D) debris is permitted for disposal in the CCAFS landfill, whereas O&M wastes must go to the Brevard County landfill. The proposed project must reflect the proper disposal method in the design specifications to ensure compliance with existing permits.
- h. Land Impacts: Areas of major environmental concern associated with this item include the loss of vegetation and disturbance of “natural” land that may provide habitat for various types of wildlife. Similarly, the disturbance of the ground could impact burrowing animals, such as the gopher tortoise. Other issues include the disposal of vegetation from land clearing, underground utilities, archaeological sites, wetlands, etc. If your project includes any type of vegetation removal, land clearing, tree trimming (other than routine landscape maintenance), digging, grading or activity in or near wetlands/surface waters, check yes for this item.
- i. Exterior Lighting: Exterior lights at or near Atlantic coastal beaches in Florida have been proven to disrupt sea turtle nesting. Consequently, NASA and the Air Force have developed exterior lighting policies to minimize adverse impacts

to threatened and endangered sea turtles that nest on their beaches. Should the project include exterior lights, either new or replacement of existing, check yes and the appropriate environmental office will monitor the design of your project to ensure compliance with the applicable policies. Typically exterior lights, that are not directly related to a color rendition or explosion proof requirement, will be the lowest wattage, low pressure sodium fixture that meets the needs of your request.

- j. Historic Property: Several facilities at KSC and CCAFS are listed or are eligible for inclusion in the National Register of Historic Places (NRHP). All activities or “undertaking” on these properties must be reviewed to determine the effects on the property. If your activity is at or near any of the facilities listed in this section, check yes.
- k. Tanks: Any vessel that stores liquids, other than drinking water, must be evaluated for potential environmental effects. Some tanks require registration with the State based upon the quantity and type of material being stored. All tanks must be identified in the tank management program and various containment and piping requirements may apply. If you suspect the involvement of any new or existing tanks, including associated piping or containment, check yes and the environmental tank program managers will identify if any regulatory requirements apply.
- l. Other: If aspects of the proposed project/work does not fit into any of the above categories, but may have an affect on human health or the natural environment, explain in the space provided. This space should also be used to explain or identify specific aspects of the above items, as necessary. If there is not enough space to adequately explain the item you are describing, please attach an additional sheet and reference a continuation sheet in case they should become separated.
- m. Hazardous Material and Waste: A number of items have the potential to adversely effect human health or the natural environment. Consequently, use of these items in the construction and/or operation of your proposed project will require special storage, handling and disposal. Hazardous materials usually constitute items that possess any one or more of the following characteristics: corrosive, flammable, toxic and/or reactive. If you are not sure, contact the appropriate environmental office to determine if hazardous materials may be used in your project. In addition, should hazardous materials be included in your proposed project, the environmental office may be able to identify an acceptable non-hazardous alternative through the Affirmative Procurement (AP) program. Wastes generated from use of hazardous materials will generally be classified as a hazardous waste, which requires special handling and disposal. Contact the appropriate environmental planning office for guidance regarding proper management of hazardous waste generated by your activities or for assistance in determining waste characteristics.
- n. Asbestos Containing Material (ACM): Due to the age of many of the buildings and structures on KSC and CCAFS, it is likely that if your project effects an existing facility, ACM may be encountered. If the project involves new construction or is remote from existing structures and/or utilities then it is unlikely that any ACM’s would be disturbed by your action(s). Many of the existing facilities have already been sampled and the ACM’s are already identified. Contact the JBOSC Industrial Hygiene Office at 867-2400 to determine if the project will impact a known ACM source or access the JBOSC on-line ACM survey database at <http://kscboc-w3.ksc.nasa.gov/fams>. If the potential for the presence of ACM’s exists, sampling must be requested so a determination can be made for all possible sources.
- o. PCB: Polychlorinated Biphenyls (PCB) are chemicals that are primarily found in some types of fluids used in electrical equipment, i.e., electrical transformers, switches, ballasts, etc. Non-liquid PCB’s may also be present in older paint coatings, caulking and other materials. The primary environmental concern associated with PCB is its potential to cause cancer. Consequently, all projects or jobs that will come in contact with any fluid filled electrical equipment, or non-liquid materials suspected of containing PCB’s should include sampling and analysis for PCB’s. A current analysis (within six months) must accompany each fluid-containing piece of electrical equipment requiring disposal.
- p. Radiation: Various types of mission related equipment has the potential to emit radiation that could affect human health and the well being of other living organisms. Typically, the project/job requestor is aware of the dangers associated with the equipment being constructed, installed or worked on. However, in some cases, work may be requested that would take place within a zone of influence for an existing piece of equipment, thereby requiring shut-down or some other operational constraint. Therefore, if you know the project will involve a radiation source, or is in the vicinity of a potential source of radiation (radar, microwave transmitter, etc.) check yes.

REQUIRED ENVIRONMENTAL MANAGEMENT PROCEDURES FOR NASA/KSC PROJECTS

SECTION 7m - p.

If all items in Section 7a-l are marked “no” you do not need to submit the checklist to the NASA Environmental Program Office (TA-C3). However, the following instructions must be adhered to and documented for activities identified under Section 7m-p of the Environmental Checklist.

- m. Hazardous Material and Waste: Use, storage, generation and/or disposal of hazardous, potentially hazardous, or toxic materials. For waste disposal, a Process Waste Questionnaire (PWQ) must be completed through the JBOSC Waste Management Authority (867-8640). Please adhere to requirements identified in the KHB’s 8800.6 and 8800.7.
- n. Asbestos Containing Material: This is a regulated material that can no longer be used in construction materials. If this project will disrupt (in any way) construction materials, an asbestos survey should be completed if one has not already been completed. Contact JBOSC Environmental Health at 867-2400 for a Support request. JBOSC Environmental Health has completed a KSC-wide asbestos survey and the data is compiled on the KSC Environmental Health Asbestos Survey Data Home Page (<http://ksboc-w3.ksc.nasa.gov/fams>). If you know that asbestos exists and will be disturbed, regulations from 62-257 F.A.C. must be followed. If less than 260 linear feet, or less than 160 square feet of regulated asbestos containing material (RACM) is to be removed, there are no fee or reporting requirements. If the removal trips these thresholds, or is greater than 1 cubic meter (if the project cannot be measured in linear or square feet), regulations require a notification (completed by JBOSC) to FDEP. The Permitting and Compliance Group within TA-C3 Environmental Program Office must be copied on all reports submitted to FDEP.
- o. PCB: If the project requires the installation, modification, removal or refurbishment of polychlorinated biphenyl (PCB) containing materials, proper labeling, storing, and disposal methods must be followed. For waste disposal, a Process Waste Questionnaire [KSC Form 26-551 (3/82)] must be completed through the JBOSC Waste Management Authority (867-8640). Please adhere to requirements identified in KHB’s 8800.6 and 8800.7.
- p. If the project includes generation or use (excluding microwave ovens) of ionizing or non-ionizing radiation, the equipment involved must be reviewed and approved by the KSC Radiation Protection Officer at 867-4237.